

# BookletChart™

## Little Girls Point to Silver Bay

NOAA Chart 14966

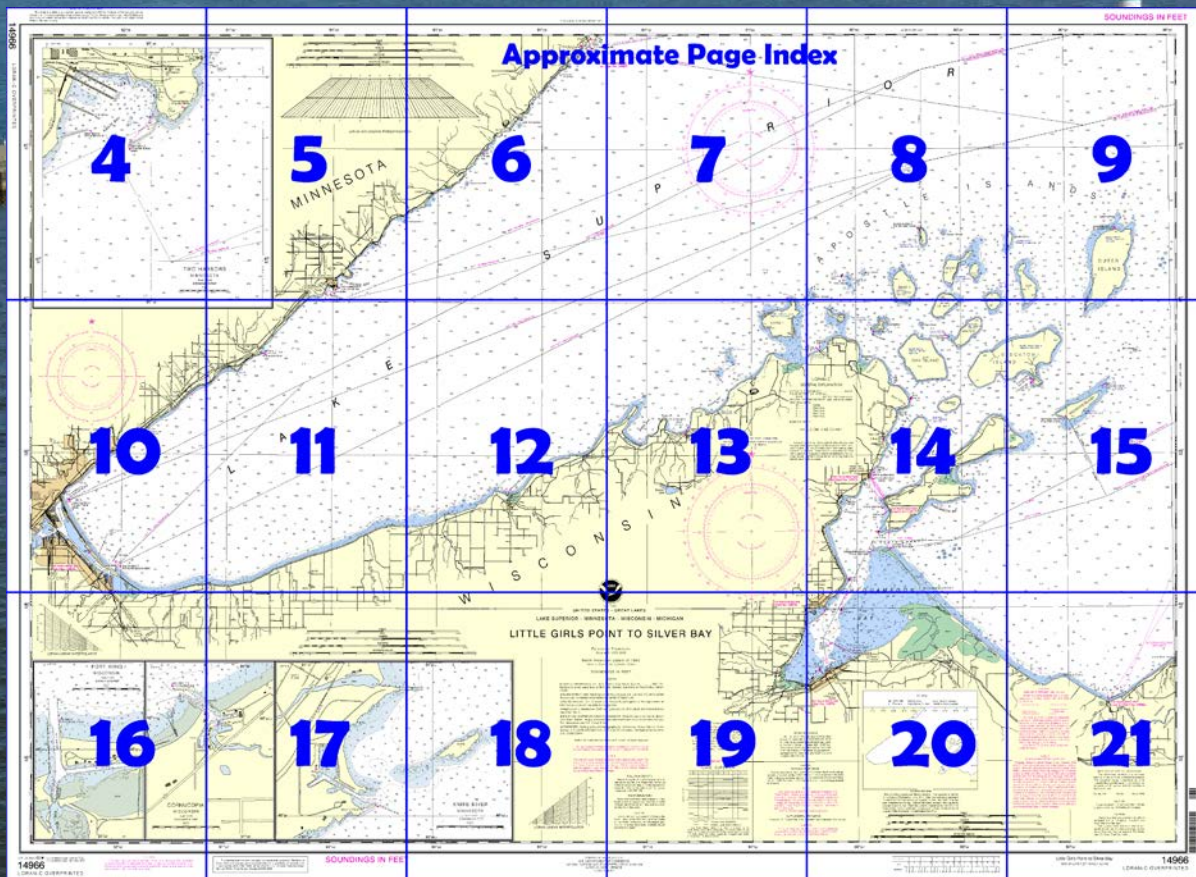


*A reduced-scale NOAA nautical chart for small boaters*

*When possible, use the full-size NOAA chart for navigation.*



- Complete, reduced-scale nautical chart
- Print at home for free
- Convenient size
- Up-to-date with Notices to Mariners
- Compiled by NOAA's Office of Coast Survey, the nation's chartmaker



**Published by the**  
**National Oceanic and Atmospheric Administration**  
**National Ocean Service**  
**Office of Coast Survey**  
[www.NauticalCharts.NOAA.gov](http://www.NauticalCharts.NOAA.gov)  
**888-990-NOAA**

### What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

### What is a BookletChart™ ?

This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <http://www.NauticalCharts.NOAA.gov>.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

### Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.

For latest Coast Pilot excerpt visit the Office of Coast Survey website at <http://www.nauticalcharts.noaa.gov/nsd/searchbychart.php?chart=14966>



#### (Selected Excerpts from Coast Pilot).

**Sand Point**, about 5 miles WSW of Point Detour, and **Squaw Point**, 2 miles NNE of Cornucopia, are prominent.

**Madeline Island**, the southernmost and largest of the Apostle Islands, is 12 miles long NE and SW and 1 to 3.2 miles wide. A shoal with depths less than 6 feet extends 0.5 mile SW from the SW point of the island. The outer end of the shoal is marked by a lighted buoy. Shoals extend 0.1 to 0.5 mile off the S shore of the island.

**Big Bay**, the large bight midlength of the S shore, has deep water within 0.1 mile of its head. Shoals extend off 0.9 mile around the E point of the

island. The NW shore of the island is bold and has deep water within 0.25 mile. At **Point De Froid**, the NW point of the island, a shoal extends 0.4 mile W. The W shore of the island has deep water within 0.35 mile.

**La Pointe Harbor** serves the village of **La Pointe, Wis.**, a small old settlement and summer resort just S of Point De Froid at the W end of Madeline Island. A ferry operates between La Pointe and Bayfield.

**Cornucopia, Wis.**, is a small-craft harbor at the mouth of **Siskiwit River** on the SE side **Siskiwit Bay**, about 13.5 miles SW of Point Detour. The harbor is a base for commercial fish tugs and a refuge for recreational craft.

From Cornucopia SW for about 14 miles to Port Wing, the shore is relatively bold and can be approached within 0.5 mile, except at Bark Point where shoals extend 0.8 mile NE. **Bark Point** (46°53.1'N., 91°11.1'W.) encloses the W side of **Bark Bay**. The bay has fair holding ground with protection from all but NE winds. **Roman Point** encloses the E side of Bark Bay and separates it from Siskiwit Bay.

**Herbster, Wis.**, is a small settlement at the mouth of **Cranberry River**, 5.2 miles SW of Bark Point. In 1983, the wharf at the village was in ruins.

**Port Wing, Wis.**, is a village and small-craft harbor at the mouth of **Flag River**, about 28 miles SW of Point Detour and 34 miles E of Duluth. The harbor is used by commercial fish tugs and recreational craft.

**Allouez Bay** is a very shallow bay that extends SE from Superior Bay S of Superior Entry and is enclosed on the E by **Wisconsin Point**.

**St. Louis River** flows into the W side of Superior Bay near its N end through a narrow gap between **Rices Point** on the N and **Connors Point** on the S. **St. Louis Bay** is a widening in the river that extends from these points to **Grassy Point**, 3 miles SW. **Howards Bay** is a narrow inlet that leads SE from St. Louis Bay for 1 mile on the W side of Connors Point.

**Superior Harbor** is entered from deep water in Lake Superior between converging breakwaters and parallel piers to the S end of Superior Bay. The outer ends of the breakwaters and piers are marked by lights.

Federal project depths are 31 to 27 feet in Superior Entry, thence 27 feet in Superior Harbor Basin and anchorage area, Allouez Bay Channel, and Superior Front Channel. (See Notice to Mariners and latest editions of charts for controlling depths.)

**Duluth Harbor** is entered from deep water in the lake between parallel piers to the N end of Superior Bay.

**Caution.**—Much of the Ashland waterfront is in ruins. Piles and submerged piles extend up to 2,300 feet from shore throughout the area. The remains of piles are often adrift in the harbor.

In 1987, submerged debris was reported immediately N of the Ashland Breakwater, extending at least 4,900 feet off the breakwater, with heaviest concentration at a point about 2,790 feet, 061° from Ashland Breakwater Light.

Bayfield, **Caution.**—Submerged dock ruins, covered 2 feet and marked at the outer end by a buoy, extend 550 feet from shore 0.9 mile SW of Bayfield Harbor South Breakwater Light.

**Caution.**—A sunken wreck is 0.9 mile ENE of the entrance to Duluth Ship Canal.

The area immediately ESE of Duluth Harbor Basin Traffic Lighted Buoy is subject to shoaling.

**Local magnetic disturbance.**—Differences from normal variation of 001°E to 005°E have been observed in the lake about 10 miles from Duluth.

**Harbor regulations.**—A speed limit of 8 mph (7 knots) is enforced in Duluth-Superior Harbor. (See **33 CFR 162.110**, chapter 2, for harbor regulations.)

### U.S. Coast Guard Rescue Coordination Center 24 hour Regional Contact for Emergencies

RCC Cleveland

Commander

9th CG District

Cleveland, OH

(216) 902-6117



# Navigation Managers Area of Responsibility



**NOAA's navigation managers** serve as ambassadors to the maritime community.

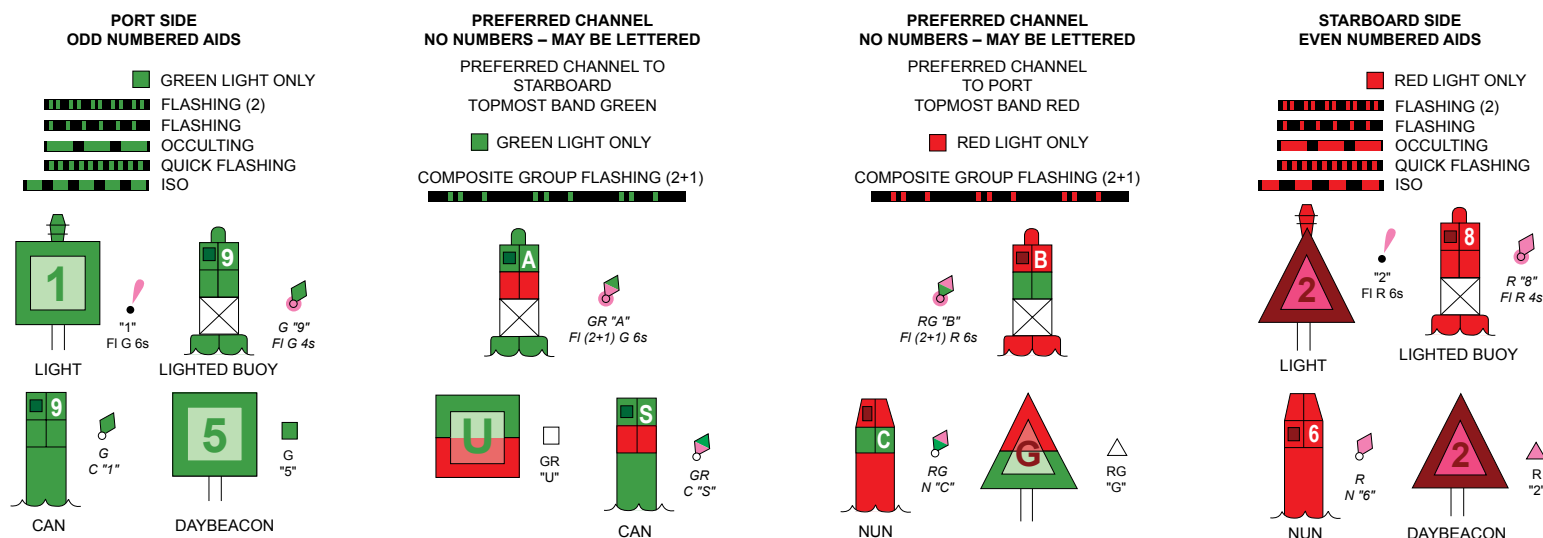
They help identify navigational challenges facing professional and recreational mariners, and provide NOAA resources and information for safe navigation. For additional information, please visit [nauticalcharts.noaa.gov/service/navmanagers](http://nauticalcharts.noaa.gov/service/navmanagers)

To make suggestions or ask questions online, go to [nauticalcharts.noaa.gov/inquiry](http://nauticalcharts.noaa.gov/inquiry).

To report a chart discrepancy, please use [ocsdata.ncd.noaa.gov/idrs/discrepancy.aspx](http://ocsdata.ncd.noaa.gov/idrs/discrepancy.aspx).

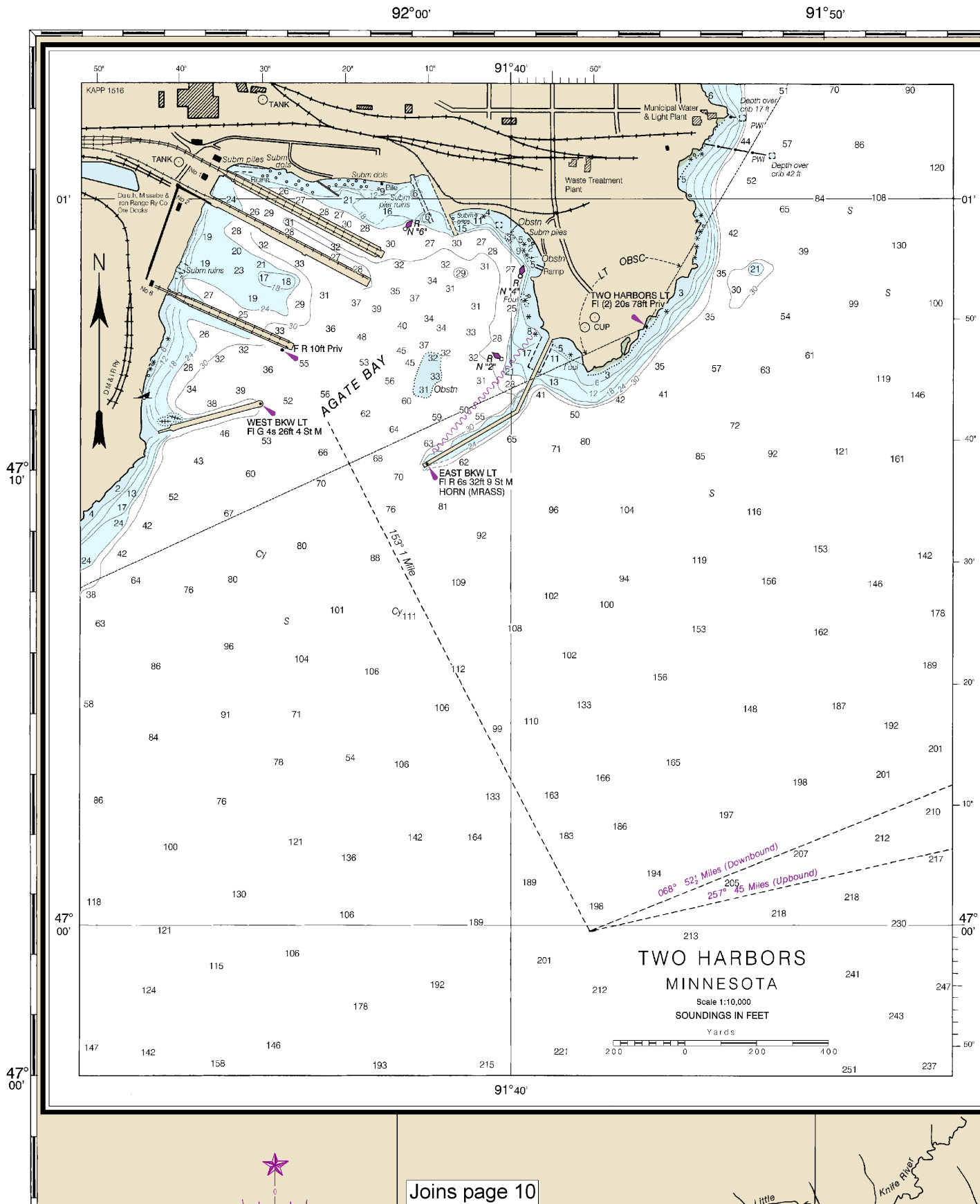
## Lateral System As Seen Entering From Seaward

on navigable waters except Western Rivers



For more information on aids to navigation, including those on Western Rivers, please consult the latest USCG Light List for your area.

These volumes are available online at <http://www.navcen.uscg.gov>



Joins page 10

Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

YARDS

See Note on page 5.

STATUTE MILES

91°40'

91°30'

91

SCALE 1:120,000

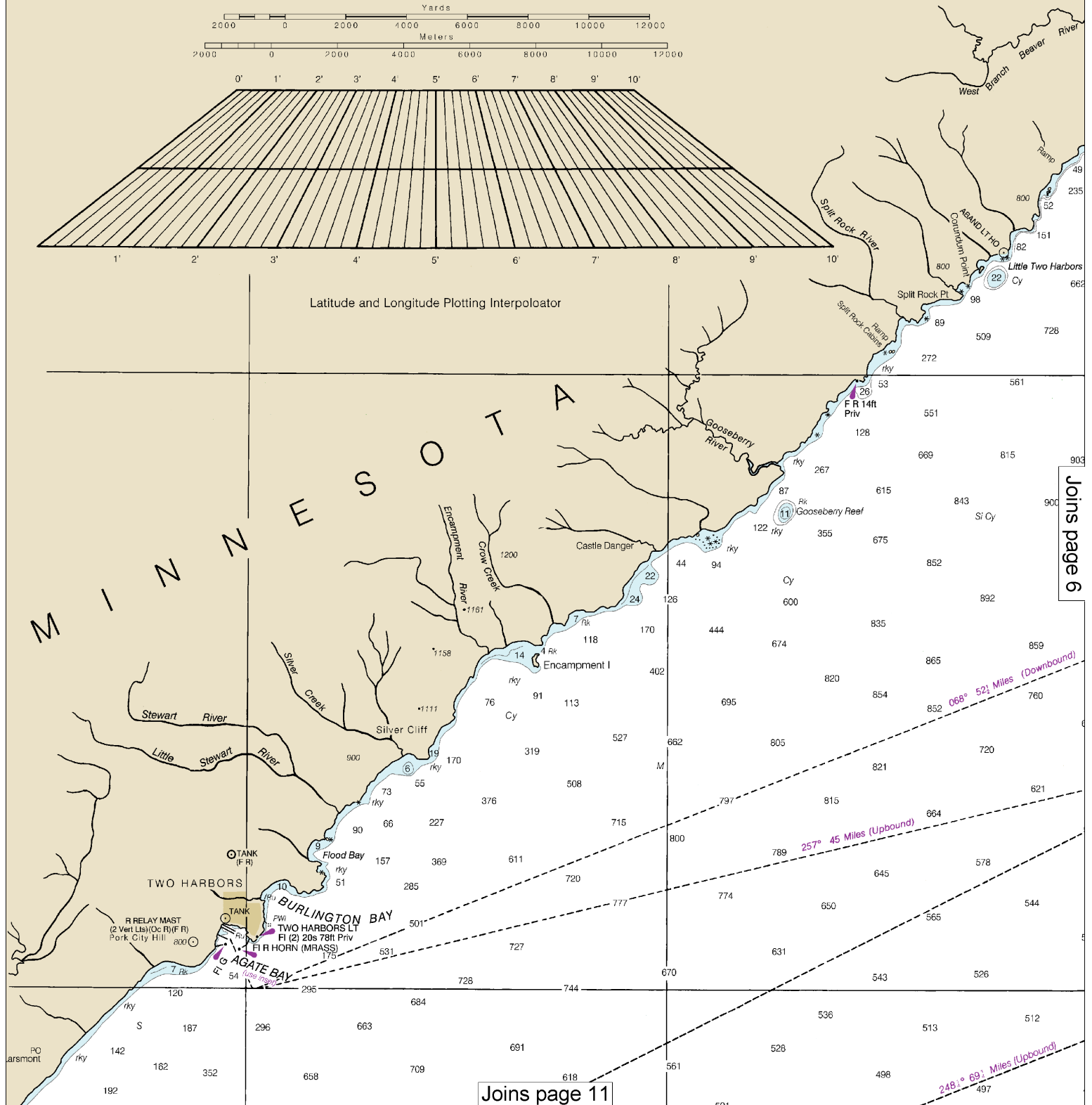
Nautical Miles

Statute Miles

Yards

Meters

Latitude and Longitude Plotting Interpolator



Joins page 6

Joins page 11

This BookletChart was reduced to 75% of the original chart scale.  
 The new scale is 1:160000. Barscales have also been reduced and  
 are accurate when used to measure distances in this BookletChart.

Joins page 5

Joins page 12

# 6

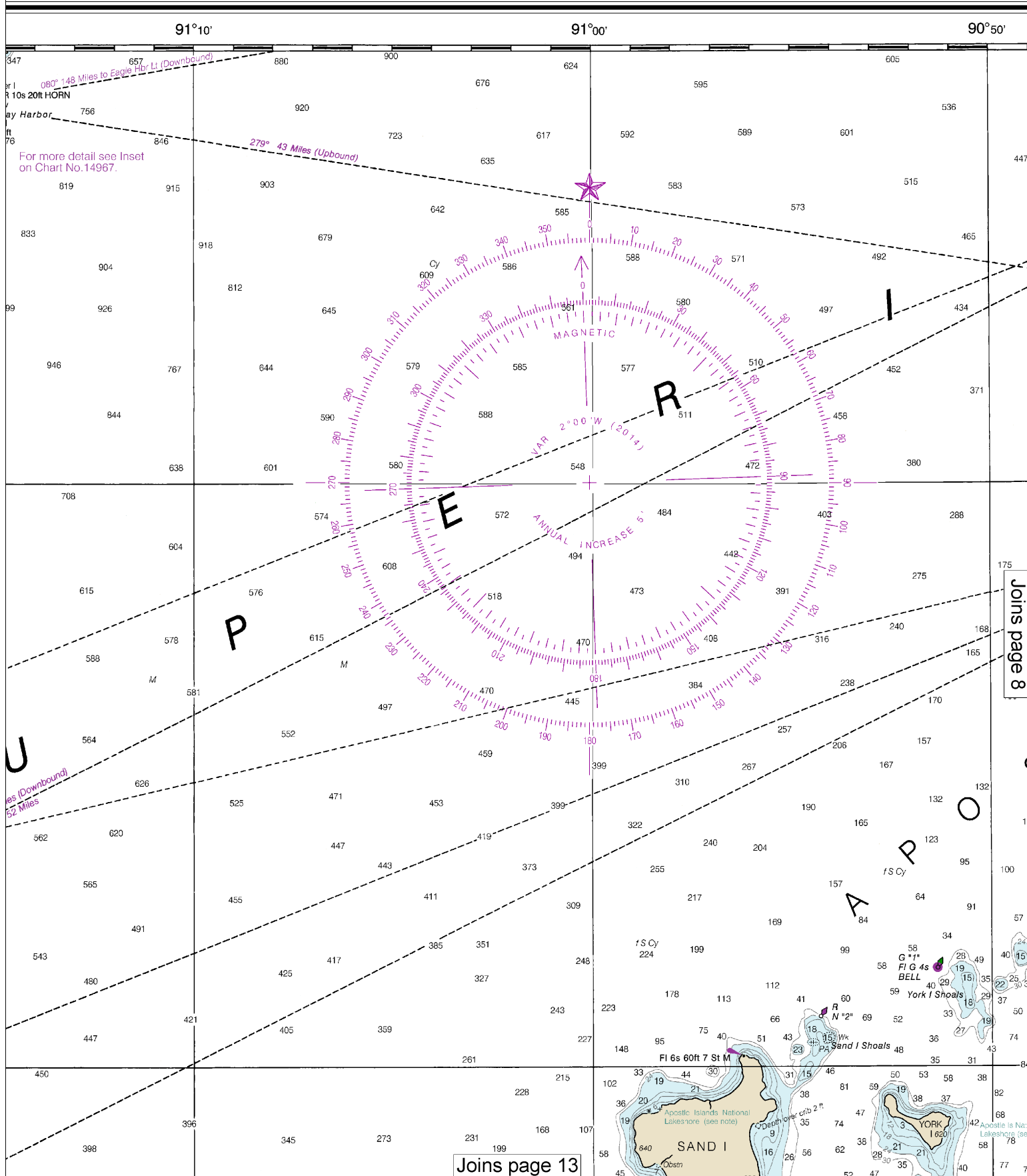
Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

YARDS

See Note on page 5.

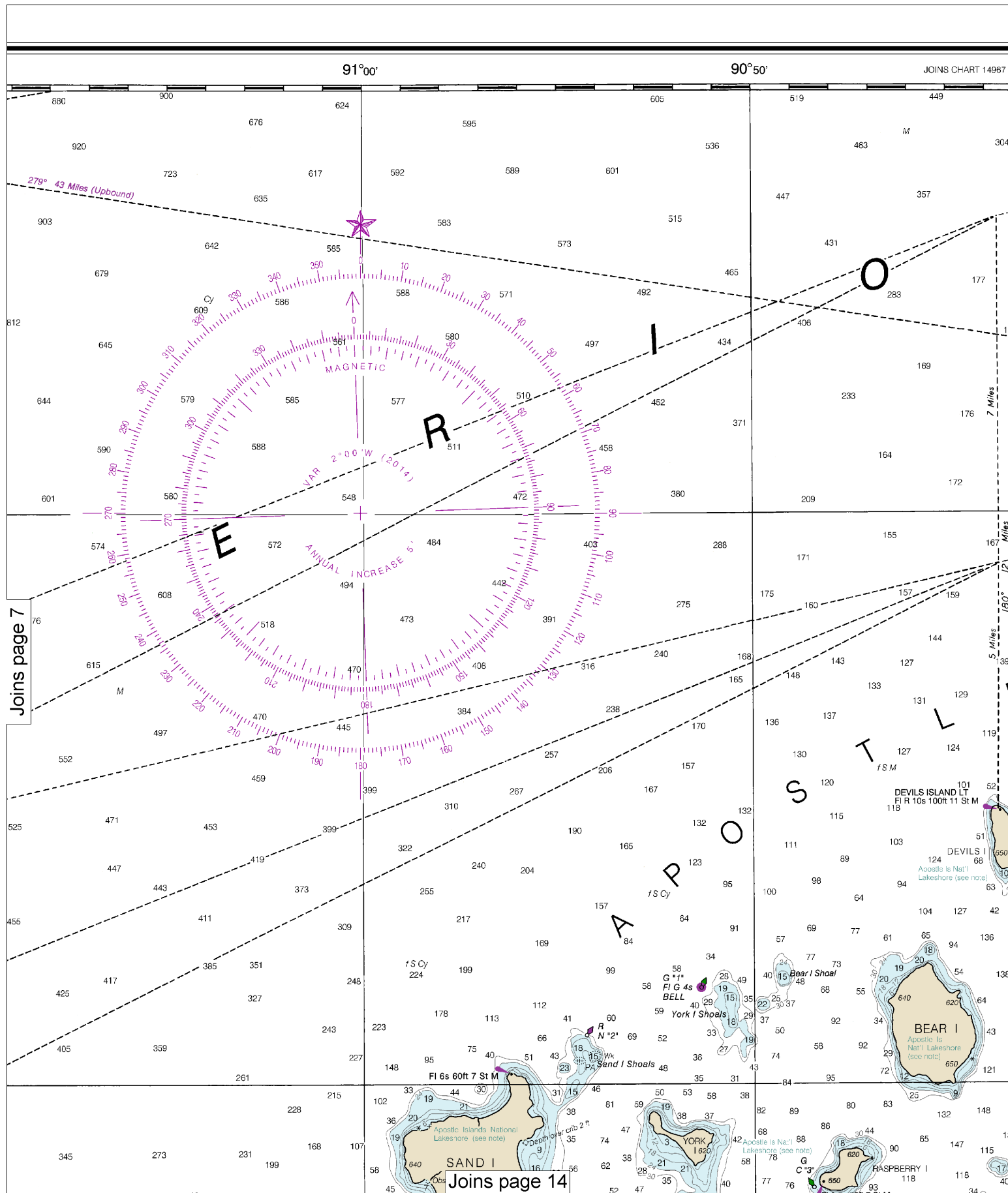
STATUTE MILES



Joins page 8

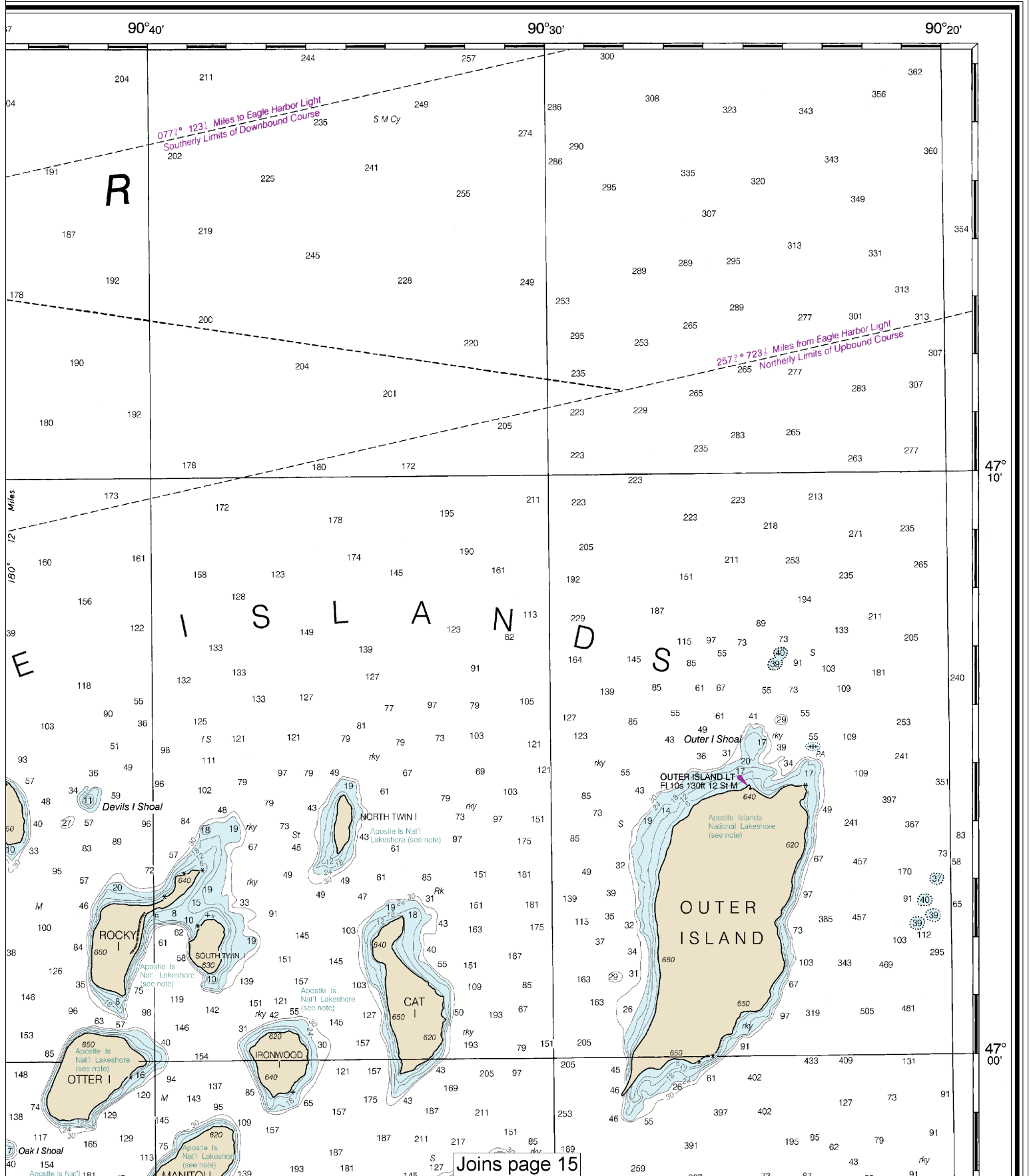
Joins page 13

Last Correction: 11/10/2016. Cleared through:  
 LNM: 4616 (11/15/2016), NM: 4616 (11/12/2016), CHS: 1016 (10/28/2016)



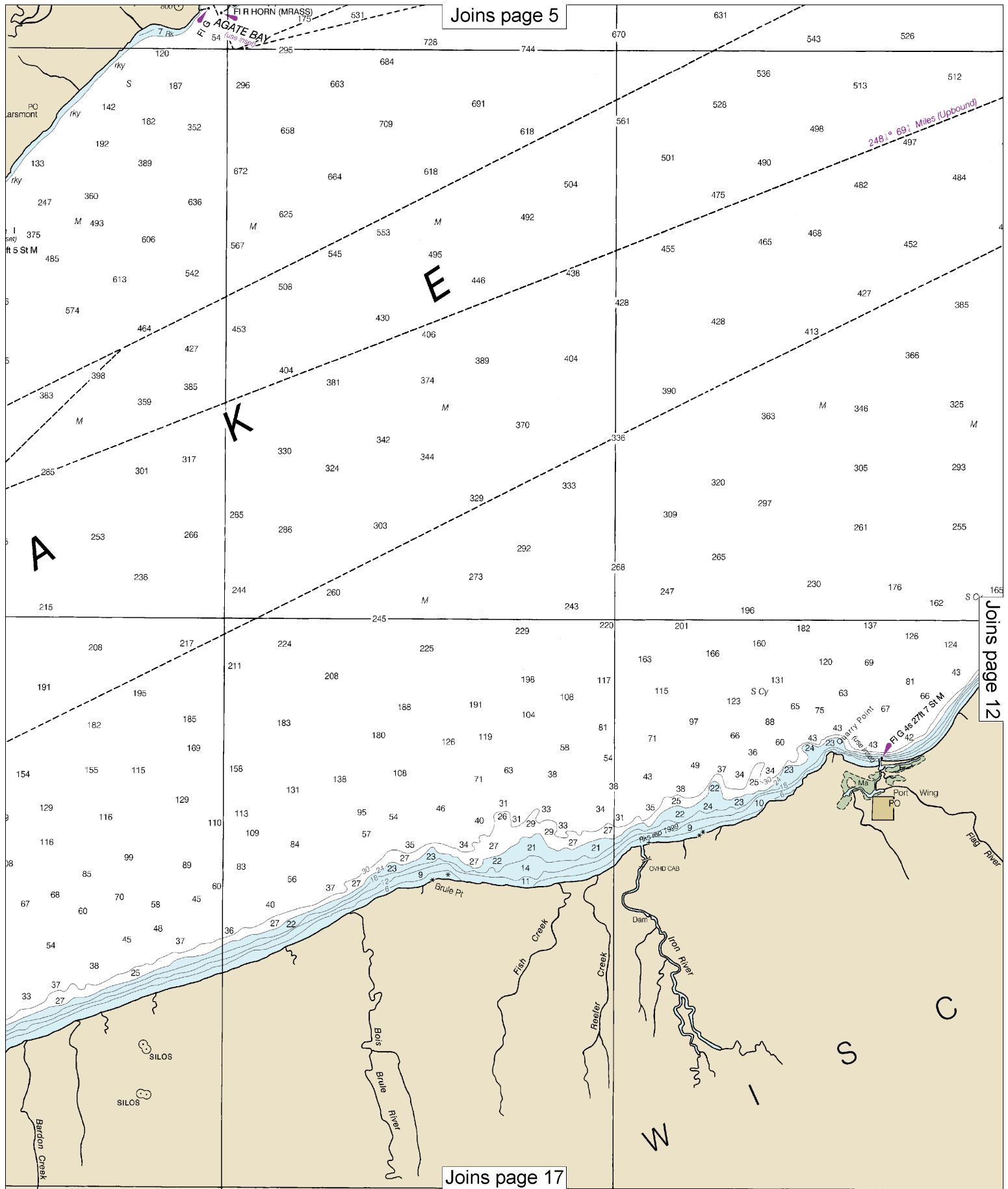


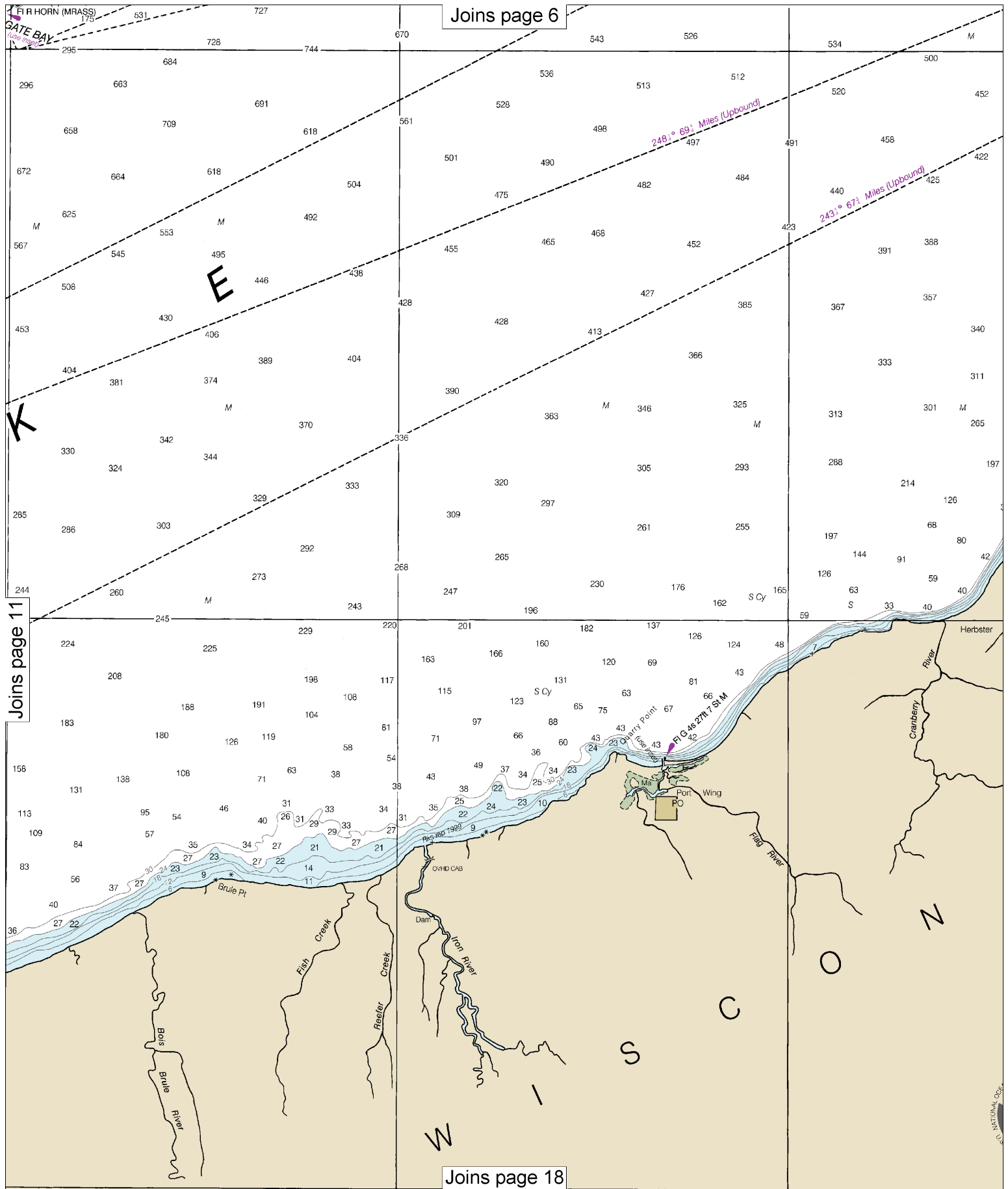
# SOUNDINGS IN FEET



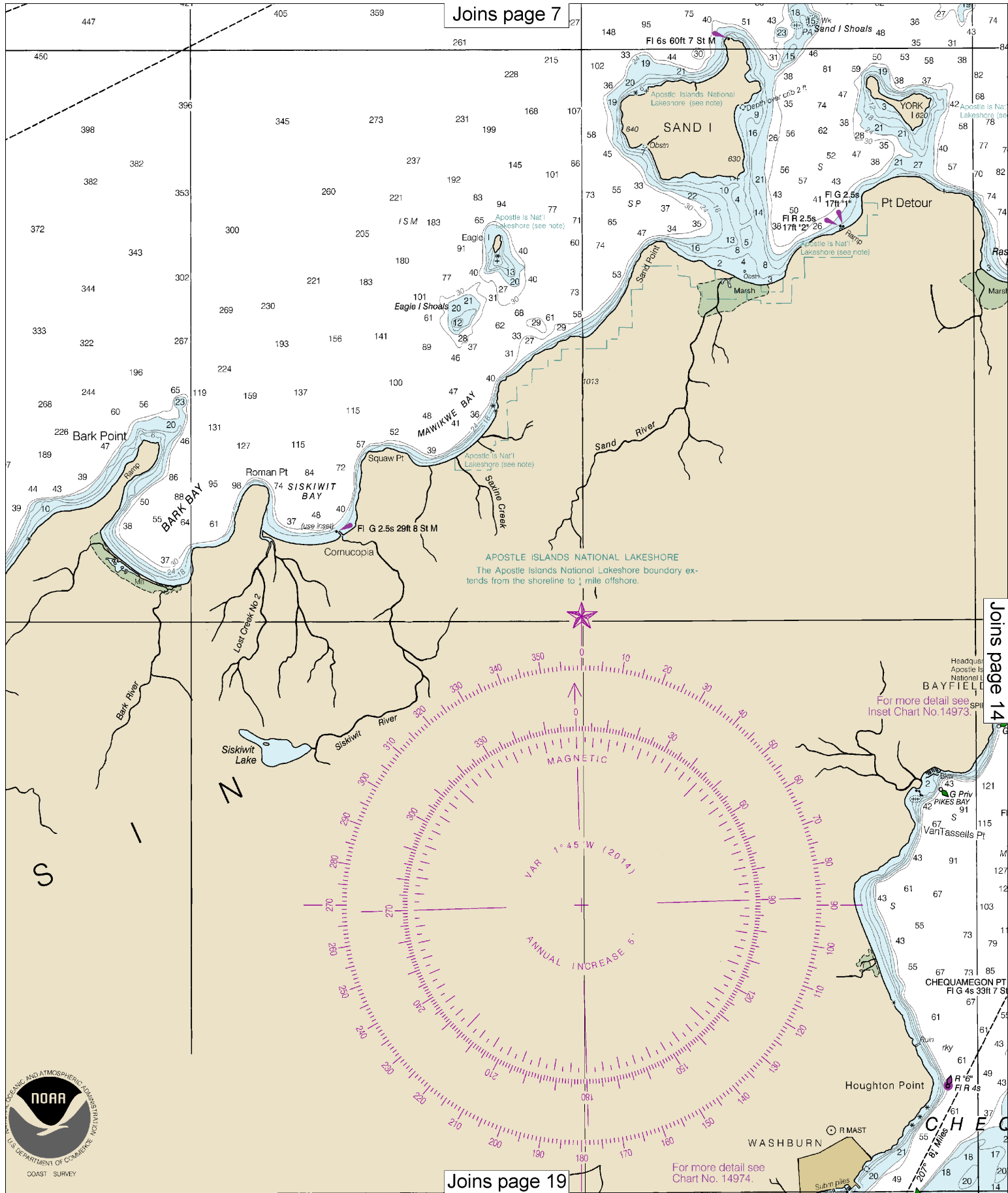
Joins page 15



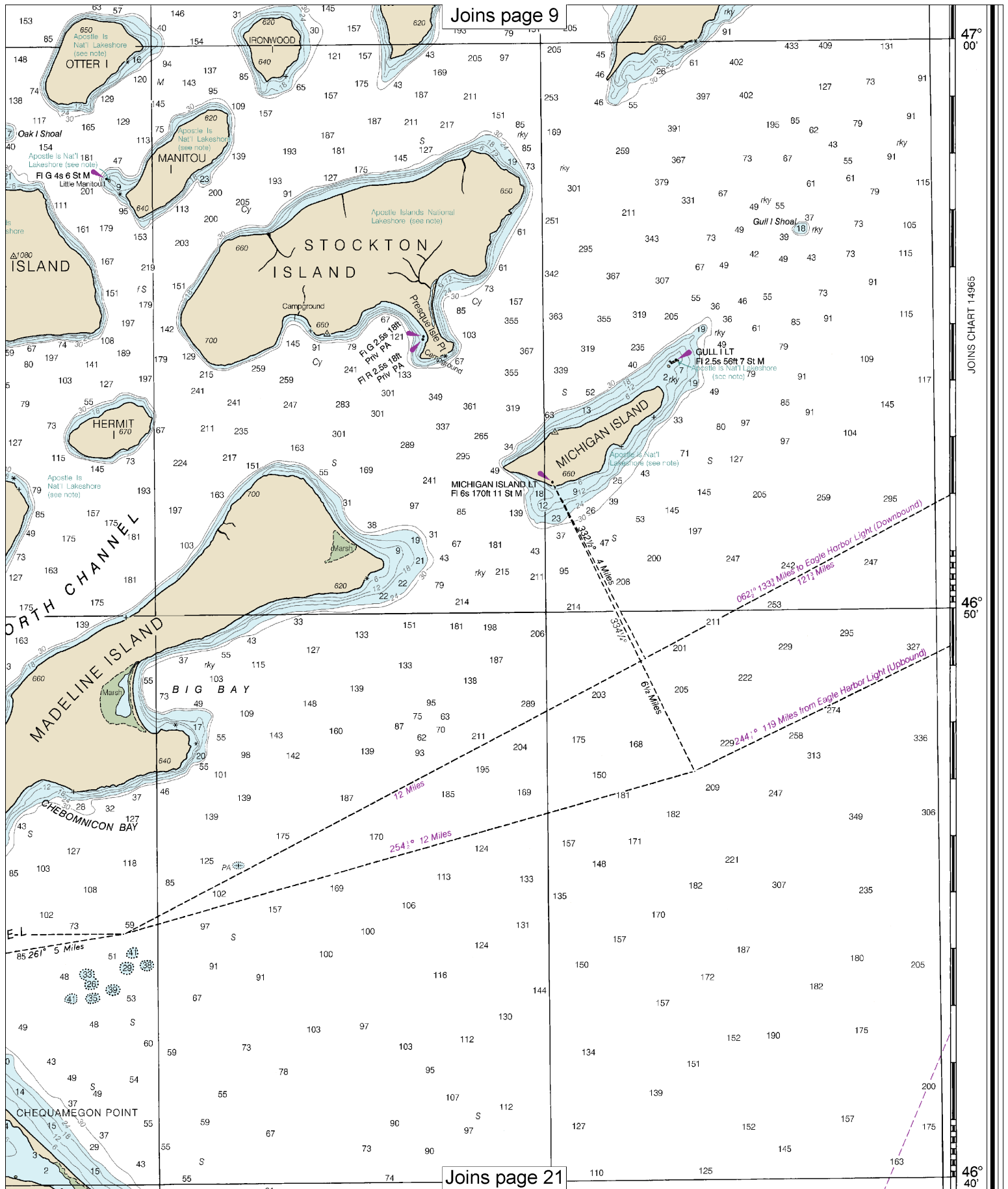




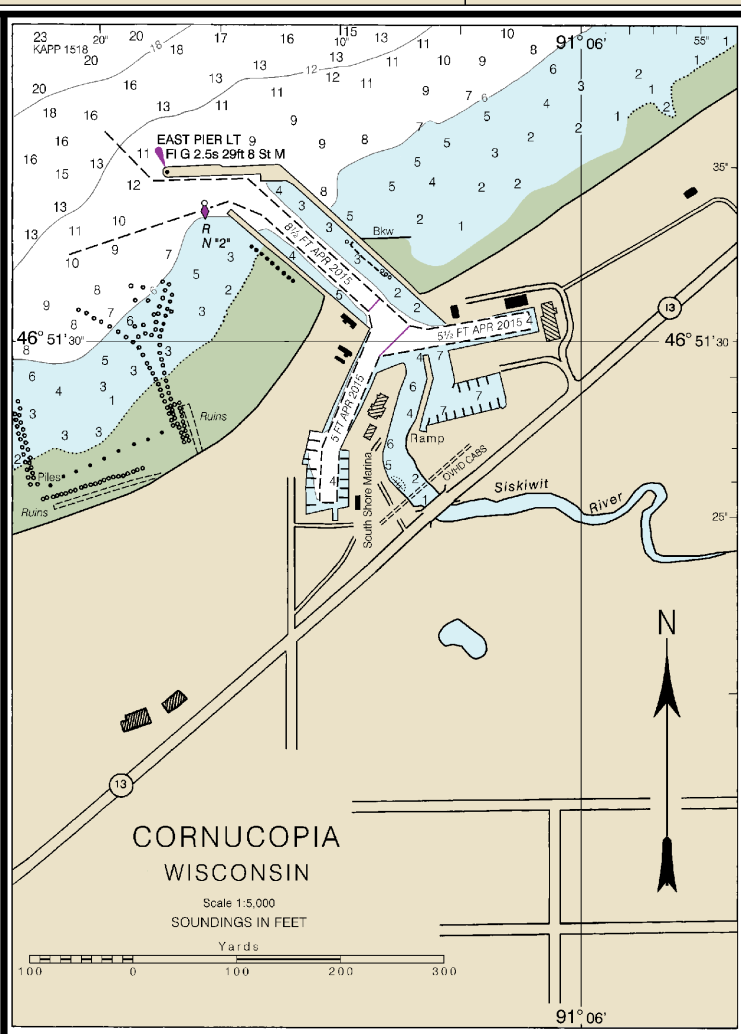
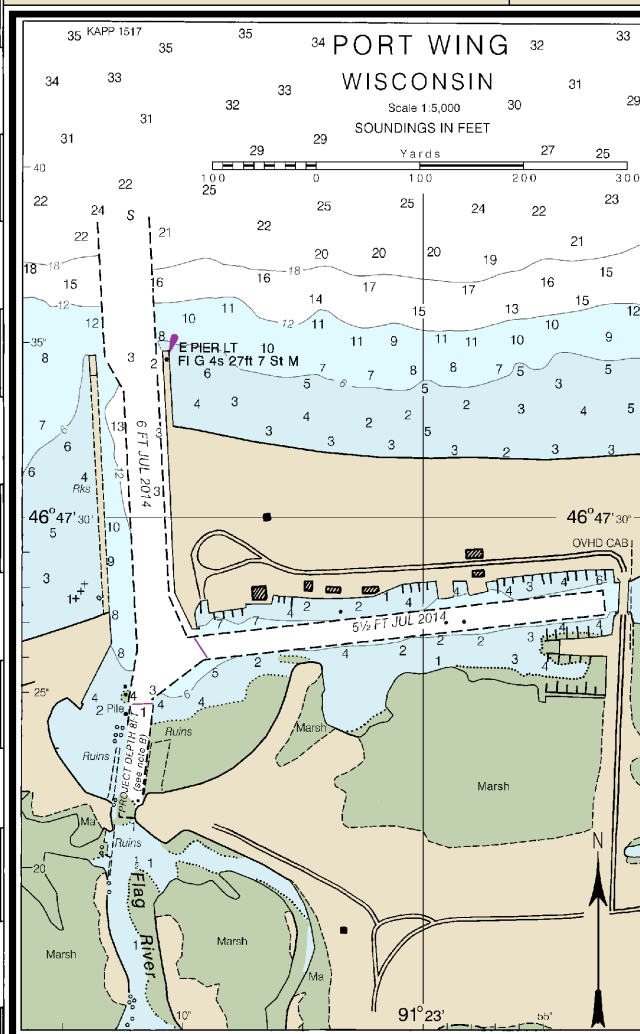








SUPERIOR

46°  
40'

28th Ed., Feb. 2014

14966

## CAUTION

This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner. Chart updates corrected from Notice to Mariners published after the dates shown in the lower left hand corner are available at [nauticalcharts.noaa.gov](http://nauticalcharts.noaa.gov).

NOAA encourages users to submit inquiries, discrepancies about this chart at <http://www.nauticalcharts.noaa.gov/start/cont>

Last Correction: 11/10/2016. Cleared through:  
LNM: 4616 (11/15/2016), NM: 4616 (11/12/2016), CHS: 1016 (10/28/2016)

16

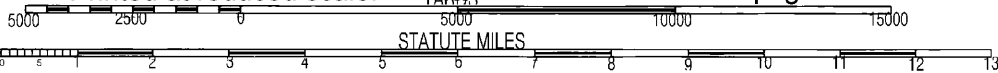
Note: Chart grid  
lines are aligned  
with true north.

Printed at reduced scale.

YARDS

See Note on page 5.

STATUTE MILES

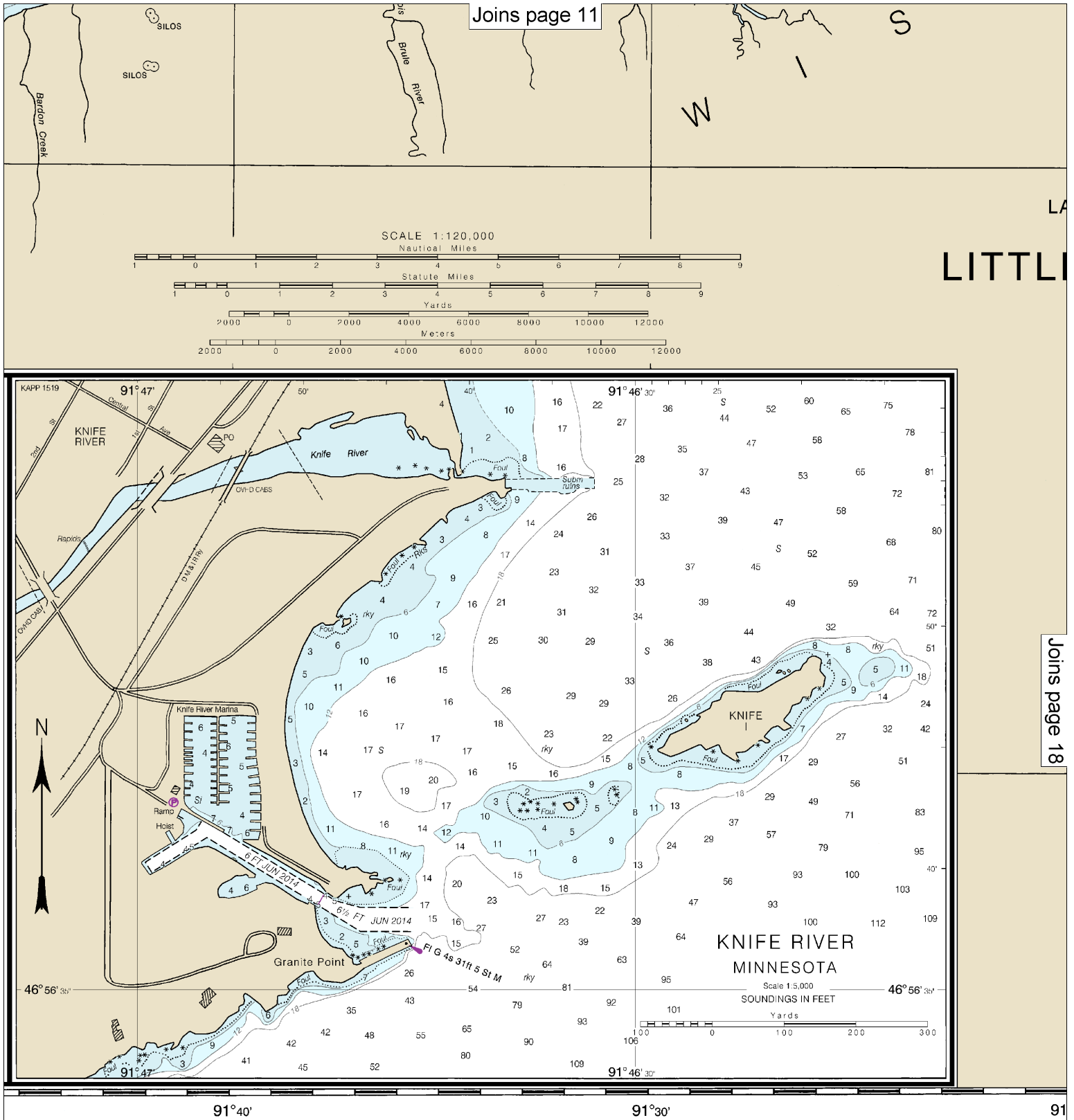




Joins page 11

LITTLE

Joins page 18



is or comments  
ntact.htm.

SOUNDINGS IN FE

Joins page 12

S

W

UNITED STATES

LAKE SUPERIOR - MINNESOTA

# LITTLE GIRLS POINT

Poly  
Sc

North America  
(World Chart)

SOUNDINGS

PLANE OF REFERENCE OF THE CHART  
Referred to mean water level at  
(1985).

SAILING DIRECTIONS. Bearing  
thereon are in statute miles be

AIDS TO NAVIGATION. Consult  
information concerning aids to

SYMBOLS AND ABBREVIATIONS  
see Chart No. 1.

BRIDGE AND OVERHEAD CABLES  
Low Water Datum, bridge and  
For clearances see U.S. Coast

AUTHORITIES. Hydrographic and  
Survey, with additional data from  
U.S. Coast Guard.

Additional information

Sailing courses and lines  
the Lake Carriers Association

The channel legend refers to  
Corps of Engineers published  
U.S. Coast Guard Local  
channel depths, direct  
Corps of Engineers, Detroit

Report all  
stances to the  
1-800-424-88  
Coast Guard  
is impossible

Radar reflecting  
floating aids  
reflector identification  
omitted from

Due to the  
Great Lakes  
at Low Water  
ticularly in the  
proceed with

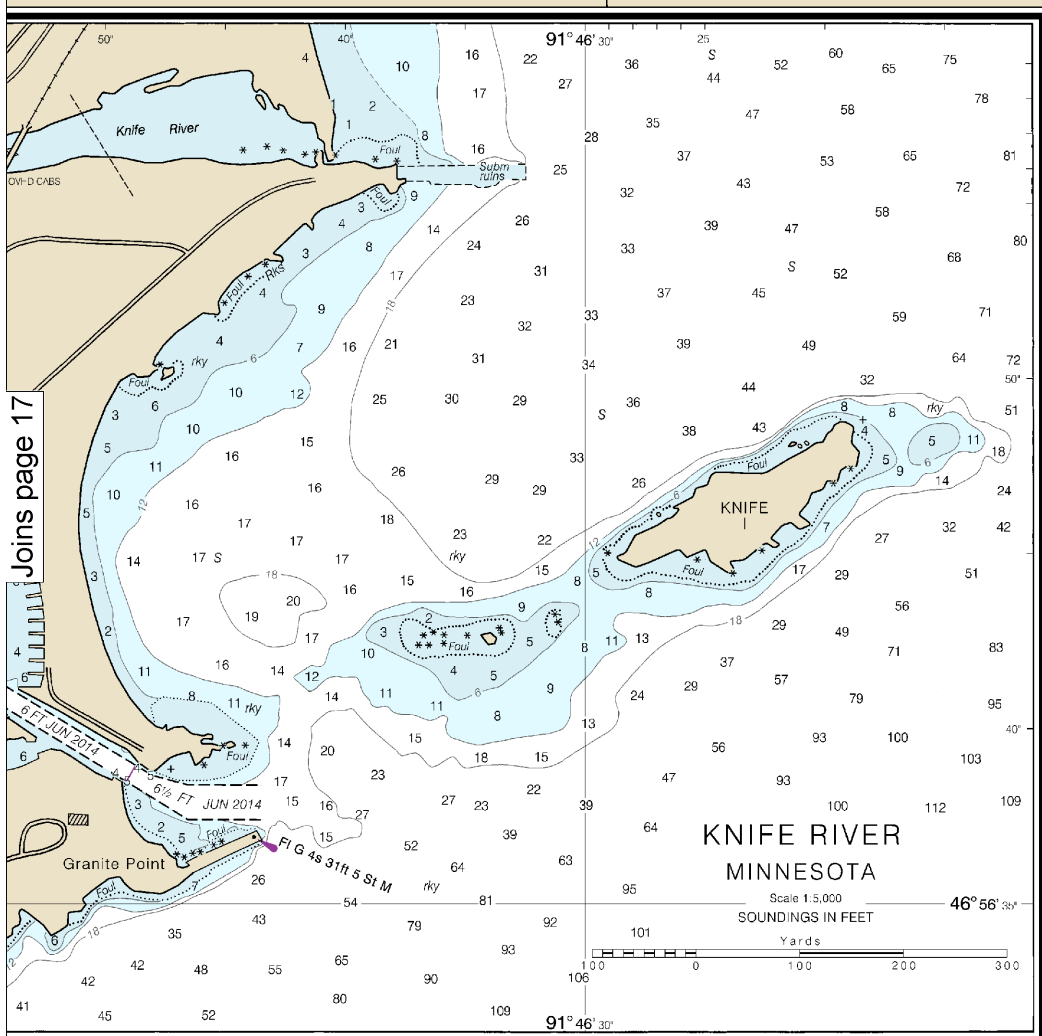
SCALE 1:120,000

Nautical Miles

Statute Miles

Yards

Meters



## SOUNDINGS IN FEET

Published by  
U.S. DEPARTMENT OF  
NATIONAL OCEANIC AND  
ATMOSPHERIC  
ADMINISTRATION  
NATIONAL COAST AND  
GEODETIC SURVEY

18

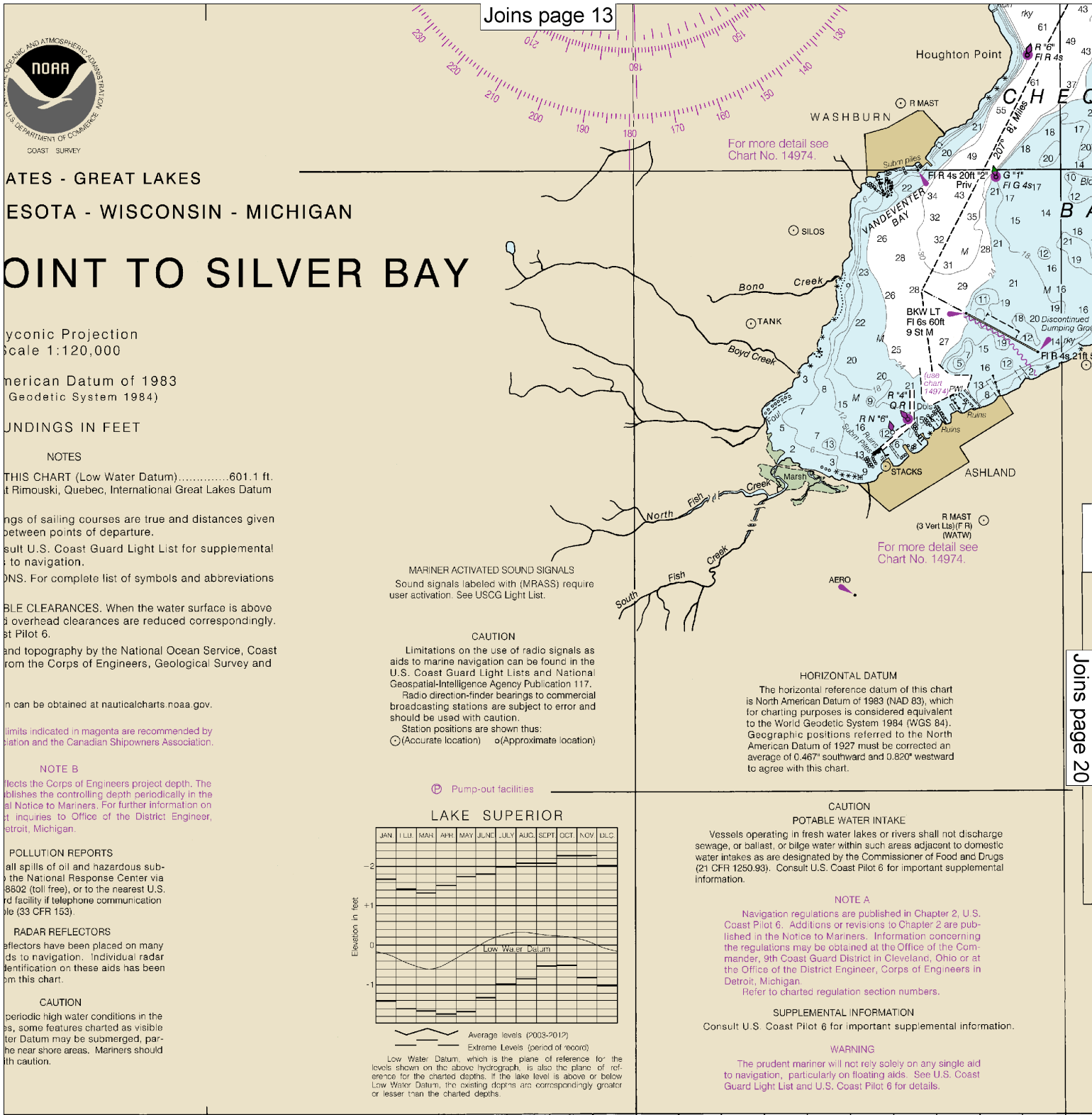
Note: Chart grid  
lines are aligned  
with true north.

Printed at reduced scale.

YARDS

See Note on page 5.

STATUTE MILES



ATES - GREAT LAKES  
ESOTA - WISCONSIN - MICHIGAN  
POINT TO SILVER BAY

Conic Projection  
Scale 1:120,000

American Datum of 1983  
(Geodetic System 1984)

OUNDINGS IN FEET

NOTES

THIS CHART (Low Water Datum).....601.1 ft.  
at Rimouski, Quebec, International Great Lakes Datum

ings of sailing courses are true and distances given  
between points of departure.

sult U.S. Coast Guard Light List for supplemental  
to navigation.

ONS. For complete list of symbols and abbreviations

BLE CLEARANCES. When the water surface is above  
overhead clearances are reduced correspondingly.  
st Pilot 6.

and topography by the National Ocean Service, Coast  
from the Corps of Engineers, Geological Survey and

n can be obtained at [nauticalcharts.noaa.gov](http://nauticalcharts.noaa.gov).

imits indicated in magenta are recommended by  
ation and the Canadian Shipowners Association.

NOTE B

fects the Corps of Engineers project depth. The  
blishes the controlling depth periodically in the  
al Notice to Mariners. For further information on  
et inquiries to Office of the District Engineer,  
etroit, Michigan.

POLLUTION REPORTS

all spills of oil and hazardous sub-  
the National Response Center via  
8882 (toll free), or to the nearest U.S.  
rd facility if telephone communication  
ile (33 CFR 153).

RADAR REFLECTORS

eflectors have been placed on many  
ds to navigation. Individual radar  
entification on these aids has been  
on this chart.

CAUTION

periodic high water conditions in the  
ps, some features charted as visible  
ter Datum may be submerged, par-  
he near shore areas. Mariners should  
th caution.

MARINER ACTIVATED SOUND SIGNALS  
Sound signals labeled with (MRASS) require  
user activation. See USCG Light List.

CAUTION

Limitations on the use of radio signals as  
aids to marine navigation can be found in the  
U.S. Coast Guard Light Lists and National  
Geospatial-Intelligence Agency Publication 117.

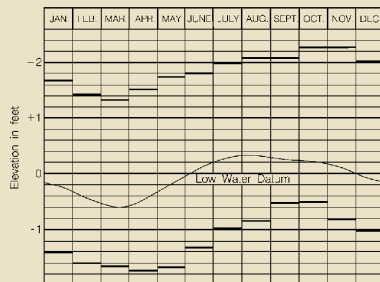
Radio direction-finder bearings to commercial  
broadcasting stations are subject to error and  
should be used with caution.

Station positions are shown thus:

⊙ (Accurate location) ○ (Approximate location)

⊕ Pump-out facilities

LAKE SUPERIOR



Low Water Datum, which is the plane of reference for the  
levels shown on the above hydrograph, is also the plane of refer-  
ence for the charted depths. If the lake level is above or below  
Low Water Datum, the existing depths are correspondingly greater  
or lesser than the charted depths.

HORIZONTAL DATUM

The horizontal reference datum of this chart  
is North American Datum of 1983 (NAD 83), which  
for charting purposes is considered equivalent  
to the World Geodetic System 1984 (WGS 84).  
Geographic positions referred to the North  
American Datum of 1927 must be corrected an  
average of 0.467" southward and 0.820" westward  
to agree with this chart.

CAUTION

POTABLE WATER INTAKE

Vessels operating in fresh water lakes or rivers shall not discharge  
sewage, or ballast, or bilge water within such areas adjacent to domestic  
water intakes as are designated by the Commissioner of Food and Drugs  
(21 CFR 1250.93). Consult U.S. Coast Pilot 6 for important supplemental  
information.

NOTE A

Navigation regulations are published in Chapter 2, U.S.  
Coast Pilot 6. Additions or revisions to Chapter 2 are pub-  
lished in the Notice to Mariners. Information concerning  
the regulations may be obtained at the Office of the Com-  
mander, 9th Coast Guard District in Cleveland, Ohio or at  
the Office of the District Engineer, Corps of Engineers in  
Detroit, Michigan.

Refer to charted regulation section numbers.

SUPPLEMENTAL INFORMATION

Consult U.S. Coast Pilot 6 for important supplemental information.

WARNING

The prudent mariner will not rely solely on any single aid  
to navigation, particularly on floating aids. See U.S. Coast  
Guard Light List and U.S. Coast Pilot 6 for details.

at Washington, D.C.  
MENT OF COMMERCE  
D ATMOSPHERIC ADMINISTRATION  
AL OCEAN SERVICE  
AST SURVEY

MICHIGAN  
SILVER BAY

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MARINER ACTIVATED SOUND SIGNALS  
Sound signals labeled with (MRASS) require user activation. See USCG Light List.

### CAUTION

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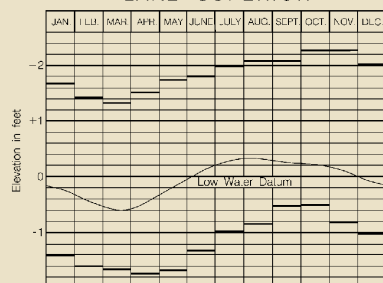
Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.

Station positions are shown thus:

⊙ (Accurate location)    ○ (Approximate location)

Ⓟ Pump-out facilities

## LAKE SUPERIOR



Low Water Datum, which is the plane of reference for the levels shown on the above hydrograph, is also the plane of reference for the charted depths. If the lake level is above or below Low Water Datum, the existing depths are correspondingly greater or lesser than the charted depths.

HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.467" southward and 0.820" westward to agree with this chart.

**CAUTION**

### POTABLE WATER INTAKE

Vessels operating in fresh water lakes or rivers shall not discharge sewage, or ballast, or bilge water within such areas adjacent to domestic water intakes as are designated by the Commissioner of Food and Drugs (21 CFR 1250.93). Consult U.S. Coast Pilot 6 for important supplemental information.

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Refer to charted regulation section numbers.

## SUPPLEMENTAL INFORMATION

Consult U.S. Coast Pilot 6 for important supplemental information.

**WARNING**

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot 6 for details.

91°00'

90°50'

# 20

Note: Chart grid lines are aligned with true north!

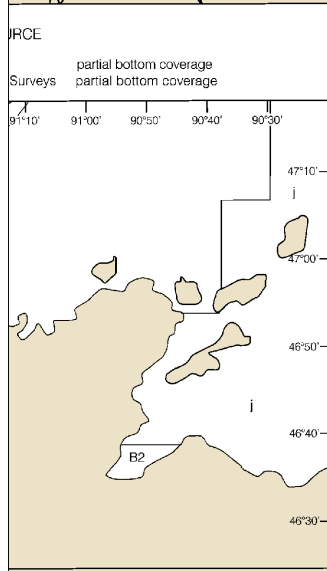
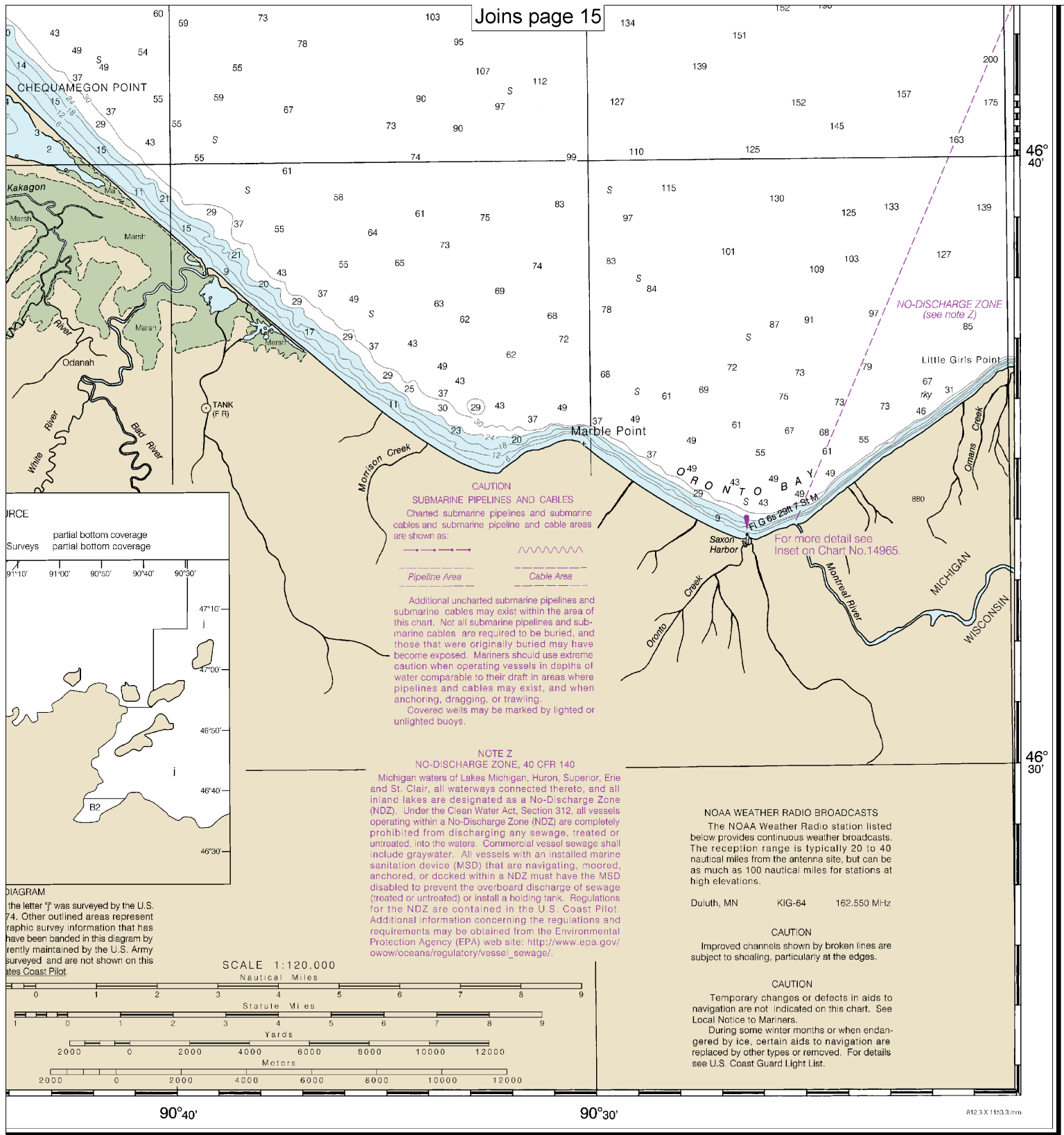
Printed at reduced scale.

YARDS

STATUTE MILES

See Note on page 5.





**DIAGRAM**  
The letter "J" was surveyed by the U.S. 74. Other outlined areas represent graphic survey information that has been banded in this diagram by recently maintained by the U.S. Army surveyed and are not shown on this Coast Pilot.

FATHOMS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
FEET	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102
METERS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

812.3 X 1153.3 mm

14966



## VHF Marine Radio channels for use on the waterways:

**Channel 6** – Inter-ship safety communications.

**Channel 9** – Communications between boats and ship-to-coast.

**Channel 13** – Navigation purposes at bridges, locks, and harbors.

**Channel 16** – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other

vessels. Contact the other vessel, agree to another channel, and then switch.

**Channel 22A** – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.

**Channels 68, 69, 71, 72 and 78A** – Recreational boat channels.

**Getting and Giving Help** — Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.

## Distress Call Procedures

- Make sure radio is on.
- Select Channel 16.
- Press/Hold the transmit button.
- Clearly say: "MAYDAY, MAYDAY, MAYDAY."
- Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
- Release transmit button.
- Wait for 10 seconds — If no response Repeat MAYDAY call.

**HAVE ALL PERSONS PUT ON LIFE JACKETS!**



**NOAA Weather Radio All Hazards (NWR)** is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service office. NWR broadcasts official Weather Service warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week.

<http://www.nws.noaa.gov/nwr/>

## Quick References

Nautical chart related products and information	—	<a href="http://www.nauticalcharts.noaa.gov">http://www.nauticalcharts.noaa.gov</a>
Interactive chart catalog	—	<a href="http://www.charts.noaa.gov/InteractiveCatalog/nrnc.shtml">http://www.charts.noaa.gov/InteractiveCatalog/nrnc.shtml</a>
Report a chart discrepancy	—	<a href="http://ocsddata.ncd.noaa.gov/idrs/discrepancy.aspx">http://ocsddata.ncd.noaa.gov/idrs/discrepancy.aspx</a>
Chart and chart related inquiries and comments	—	<a href="http://ocsddata.ncd.noaa.gov/idrs/inquiry.aspx?frompage=ContactUs">http://ocsddata.ncd.noaa.gov/idrs/inquiry.aspx?frompage=ContactUs</a>
Chart updates (LNM and NM corrections)	—	<a href="http://www.nauticalcharts.noaa.gov/mcd/updates/LNM_NM.html">http://www.nauticalcharts.noaa.gov/mcd/updates/LNM_NM.html</a>
Coast Pilot online	—	<a href="http://www.nauticalcharts.noaa.gov/nsd/cpdownload.htm">http://www.nauticalcharts.noaa.gov/nsd/cpdownload.htm</a>
Tides and Currents	—	<a href="http://tidesandcurrents.noaa.gov">http://tidesandcurrents.noaa.gov</a>
Marine Forecasts	—	<a href="http://www.nws.noaa.gov/om/marine/home.htm">http://www.nws.noaa.gov/om/marine/home.htm</a>
National Data Buoy Center	—	<a href="http://www.ndbc.noaa.gov/">http://www.ndbc.noaa.gov/</a>
NowCoast web portal for coastal conditions	—	<a href="http://www.nowcoast.noaa.gov/">http://www.nowcoast.noaa.gov/</a>
National Weather Service	—	<a href="http://www.weather.gov/">http://www.weather.gov/</a>
National Hurricane Center	—	<a href="http://www.nhc.noaa.gov/">http://www.nhc.noaa.gov/</a>
Pacific Tsunami Warning Center	—	<a href="http://ptwc.weather.gov/">http://ptwc.weather.gov/</a>
Contact Us	—	<a href="http://www.nauticalcharts.noaa.gov/staff/contact.htm">http://www.nauticalcharts.noaa.gov/staff/contact.htm</a>



— For the latest news from Coast Survey, follow **@NOAAcharts**



This Booklet chart has been designed for duplex printing (printed on front and back of one sheet). If a duplex option is not available on your printer, you may print each sheet and arrange them back-to-back to allow for the proper layout when viewing.